



DEPARTMENT OF PHYSICS

REPORT ON

CERTIFICATE PROGRAMME

Academic Year

2020 - 2021







DON BOSCO COLLEGE



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REPORT ON CERTIFICATE COURSE

ACADEMIC YEAR-2020-2021

DEPARTMENT NAME	PHYSICS	
DATE(From – To)	15.02.2021-20.03.2021	
DAY ORDER / HOUR	2.00 to 3.30 pm	
VENUE	PHYSICS LAB	
COURSE NAME	LED BULB MAKING	
STAFF NAME	S.RAMKUMAR	
NO OF PARTICIPANTS		
	36	

Certificate course conducted by S.Ramkumar Asst.Professor of Physics and This course the students have able to assemble and also able to manufacture bulb in less expense way. This course initiates students to start up a small scale industry and to it induces them to be a good



entrepreneur



NAME OF THE COURSE : LED BULB MAKING

Aim

In this study, the most prevalent luminaire uses in the current environment were used to compute, analyse, and evaluate the luminous performance, human performance, and cost of LED and traditional (linear fluorescent, compact fluorescent, and incandescent) lighting systems.

Objectives

The main goal is to conduct a feasibility study on using LED lighting to replace fluorescent lighting in business buildings and to evaluate how people function under different lighting conditions. in those lighting circumstances.

- Identify the buildings' power consumption and load factor are the study's specific goals.
- Analyze how people function under LED and conventional lighting conditions.
- Analysis of the economics of LED lighting in contrast to fluorescent lighting
- to what extent the current lighting system can be successfully replaced by LED technology





SYLLABUS

LED Bulb Making Course

Unit-I

Introduction-Types of LEDs-Efficacy-LED Construction-Organic Light Emitting Diodes (OLED)-Light Emitting Diode Colours

Unit-II

Radiation Pattern-General Characteristics of Light Sources-Drive Current Vs Light Output-Quantum Efficiency-Switching Speed-Spectral Wavelength-Spectral Width

Unit III

LED - I-V Characteristics-LED Series Resistance Calculation-Controlling of LED Light

Unit –IV

Multi – Color Light Emitting Diode-Bi-Color Light Emitting Diodes-Tri Colored Light Emitting Diode

Unit-V

LED Driver Circuits-Driving an LED Using Transistor- LED Displays-LED Advantages, Disadvantages and Applications





STUDENTS NAME LIST

2020-2021

2020-2021		
S.No	Reg.No	
1	19UCH3287	Name
2	19UCH3288	MUTHU P
3	19UCH3289	MUTHURAJ M
4	19UCH3290	NANDHA KUMAR S
5	19UCH3291	NANDHAKUMAR P
6	19UCH3292	NAVEEN K
7	19UCH3293	NIRMALKUMAR K
8	19UCH3294	PARTHIBAN M
9	19UCH3295	POOVARASAN P
10	19UCH3295	POOVARASAN V
10	19UCH3297	PRADHAP A
		PRASANTH M
12	19UCH3298	PRAVEEN KUMAR M
13	19UCH3299	PRAVEENKUMAR S
14	19UCH3300	PUGALENDHI S
15	19UCH3302	RAGAVENDRAN G
16	19UCH3303	RAGHUL R
17	19UCH3304	RAJAPANDIYAN S
18	19UCH3305	SADHASIVAM A
19	19UCH3306	SANDHEEP T
20	19UCH3307	SARANSURYA S
21	19UCH3308	SARATH KUMAR R
22	19UCH3309	SATHISH P
23	19UCH3310	SATHISHKUMAR M
24	19UCH3311	SATHISHKUMAR N
25	19UCH3312	SELVAKUMAR S
26	19UCH3313	SIVAN C
27	19UCH3314	SRIBALAGURU M
28	19UCH3315	SRIDHAR G
29	19UCH3316	SRIDHAR M
30	19UCH3317	SUNDHAR N
31	19UCH3318	SURESH S
32	19UCH3319	SURYA P
33	19UCH3320	TAMILARASAN R
34	19UCH3321	THAMODHIRAN S
35	19UCH3322	THIRUMALAIVASAN R
36	19UCH3323	ULAGANATHAN T

